Rec'd POTTO 27 JUN 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT CO



(19) World Intellectual Property **Organization** International Bureau



(43) International Publication Date 22 July 2004 (22.07.2004)

PCT

(10) International Publication Number WO 2004/060573 A1

(51) International Patent Classification⁷: 1/16, E03C 1/08

B05B 1/30,

(21) International Application Number:

PCT/GB2003/005720

(22) International Filing Date:

29 December 2003 (29.12.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0300024.7

3 January 2003 (03.01.2003) GB

- (71) Applicant (for all designated States except US): TAP-MAGIC LIMITED [GB/GB]; Allen's House, Tuddenham, Ipswich IP6 9DA (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): LAKER, Jonathan, Paul [GB/GB]; Flat 3, 96 Queen's Road, Felixstowe IP11 7PG (GB).
- (74) Agents: WILSON, Peter, David et al.; Dummett Copp, 25 The Square, Martlesham Heath, Ipswich IP5 3SL (GB).

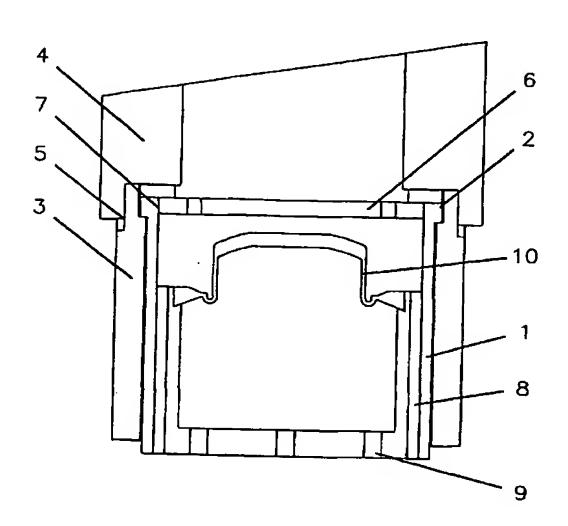
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

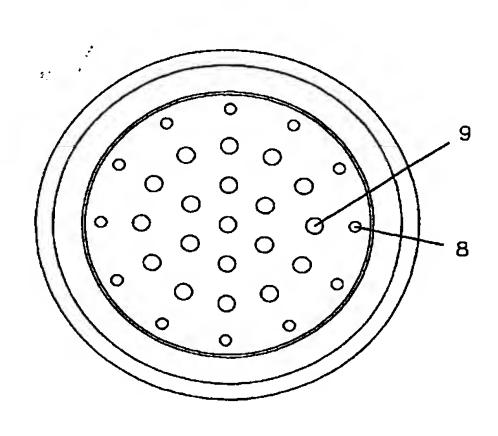
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FLUID CONTROL DEVICE





(57) Abstract: The present invention provides a device for reducing the amount of water or other fluid discharged at a tap (4), which device comprises a body member (1) having an inlet adapted to be connected to a supply of water or other fluid, dual outlets through which the fluid is to be discharged to the locus, one fluid path between said inlet and said outlet is controlled by a flow/pressure responsive valve mechanism (10) located in the inner fluid path (9) between said inlet and outlet.

INTERNATIONAL SEARCH REPORT

reations cation No PCT/GB 03/05720

PCT/GB 03/05720 A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B05B1/30 B05B1/16 E03C1/08 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 B05B E03C F16K Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category • Relevant to claim No. PATENT ABSTRACTS OF JAPAN 1-7 vol. 0151, no. 28 (C-0818), 28 March 1991 (1991-03-28) & JP 3 012249 A (TOTO LTD), 21 January 1991 (1991-01-21) abstract EP 1 078 692 A (MASCO CORP) Α 1-7,10, 28 February 2001 (2001-02-28) 11 column 3, line 11 - column 2, line 40; figures 1,3,11,12 GB 966 137 A (GIRLING LTD) 10,11 6 August 1964 (1964-08-06) page 1, line 66 - page 2, line 21 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: 'T' later document published after the International filing date "A" document defining the general state of the art which is not or priority date and not in conflict with the application but considered to be of particular relevance cited to understand the principle or theory underlying the "E" earlier document but published on or after the international invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone citation or other special reason (as specified) 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the "O' document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docuother means ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed in the art. *&* document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 29 April 2004 11/05/2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Jelercic, D Fax: (+31-70) 340-3016

INTERNATIONAL SEARCH REPORT

	ıation	cation No
_	PCT/GB 03/	05720

C 10		PCT/GB 63/05720
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category •	Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 562 960 A (CRAWFORD DENNIS W ET AL) 7 January 1986 (1986-01-07) column 3, line 9 - line 25; figures 1,7	9
A	US 5 114 072 A (BARHYDT SR DIRCK) 19 May 1992 (1992-05-19) cited in the application column 1, line 60 - column 2, line 2; figures 1-3	8
A	EP 1 166 703 A (TORAY INDUSTRIES) 2 January 2002 (2002-01-02) column 6, line 15 - column 7, line 49; figure 1	12
A	US 6 273 128 B1 (PACZONAY JOSEPH R) 14 August 2001 (2001-08-14) column 5, line 48 - column 6, line 22; figures 2,3,4a,4b,4c,5	10
1	US 5 307 955 A (VIEGAS FLEMING) 3 May 1994 (1994-05-03) column 6, line 12 - line 38; figure 3	10
	·	
	•	
	•	
		•

INTERNATIONAL SEARCH REPORT

Info

n on patent family members

PCT/GB v3/05720

	Detail to			PC1/68 03/05/20			
cite	Patent document ed in search report		Publication date		Patent family member(s)		Publication date
JP	3012249	Α	21-01-1991	NONE			
EP	1078692	Α	28-02-2001	US	6227464		
				AU	4894900		08-05-2001
				BR	0003640		01-03-2001
				CA	2314465		23-10-2001
				CN	1285244		23-02-2001
			·	EP	1078692		28-02-2001 28-02-2001
				JP	2001104205		17-04-2001
— — .				US	2001010342		02-08-2001
GB	966137	Α	06-08-1964	NONE		——	نینک بہت بہت اسا جیزہ انگانگیا جام سے سے سے سے دیارہ ان اسا
US	4562960	Α	07-01-1986	NONE			من برسم درسه درسه المناز والذي المناز والذي المناز والذي المناز والذي المناز والمناز والمناز والمناز والمناز و
US	5114072	Α	19-05-1992	CA	2060374	A1	04-04-1993
EP	1166703	 А	02-01-2002	JP	2001212018	 ^	رس کے انتخاب کی ایک کے دی کے دی کی دی کا دی
				ĴΡ	0001045044		07-08-2001
				ĂÜ	^71100		11-09-2001 14-08-2001
				EP	1166703	A1	02-01-2002
				CN	1365261	T	21-08-2002
				WO	0156445	Å1	09-08-2001
				TW	494002		11-07-2002
	·			US	2002152549	_	24-10-2002
US 	6273128	B1	14-08-2001	NONE			
US	5307955	Α	03-05-1994	AU	4393493	———— А	24-01-1994
				WO	9400363		06-01-1994